

REMARKS

Claims 1-3, 5-8, 10-13 are pending in the above-identified application. Claims 1-3, 5-8 and 10 were rejected. Claims 11-13 were added. With this amendment, claims 1 and 6 were amended. Applicants maintain that no new matter has been added. Accordingly, claims 1-3, 5-8 and 10 are at issue in the above-identified application.

Claim Rejections - 35 U.S.C. § 103


Claims 1, 2, 5-7 and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Gill* (U.S. Patent No. 6,256,178) in view of *Sato* (U.S. Patent No. 6,369,984 B1). Additionally, claims 3 and 8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Gill* (U.S. Patent No. 6,256,178) as applied to claims 1 and 6 above. Amended claim 1, from which claims 2, 3, 5 depend, recites a metal oxide layer and a first *non-magnetic conductive layer*, formed on the a first soft magnetic conductive layer, to provide a lower gap layer. Additionally, amended claim 6, from which claims 7, 8, 10 depend, recites forming, on the first soft magnetic conductive layer, a metal oxide layer and a first *non-magnetic conductive layer* to provide a lower gap layer. None of the above-cited references, either alone or in combination teach or even suggest forming on a soft magnetic conductive layer, a metal oxide layer and a first *non-magnetic conductive layer*. For example, while *Gill* describes a tunnel junction sensor having a conductive antiferromagnetic magnetic pinning layer 240, as indicated at column 7, lines 25-30 of *Gill*, *Gill* does not describe or teach forming a metal oxide layer and a first non-magnetic conductive layer, formed on a soft magnetic conductive layer to provide a lower gap layer. Accordingly, Applicants submit that the claimed invention is not anticipated by nor obvious over the applied references, either alone or in combination. Withdrawal of this rejection is respectfully requested.

CONCLUSION

In view of the remarks set forth above, Applicants respectfully submit that the present invention is in condition for allowance. Early notification to such effect to earnestly solicited. Should the Examiner have any remaining issue, Applicants kindly request that the Examiner contact the undersigned.

Respectfully submitted,

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